

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 1 and 9 are amended, claims 17-18 are canceled without prejudice or disclaimer, and no claims are withdrawn or newly presented.

1. (Currently Amended) A method for servicing requests received by a server in a multiple-user environment, the method comprising the steps of:
 - establishing a first session between said server and a first user;
 - establishing a second session between said server and a second user;
 - responding to requests that are received by said server in said first session by executing virtual machine code using a first virtual machine instance; and
 - responding to requests that are received by said server in said second session by executing virtual machine code using a second virtual machine instance;

wherein said first virtual machine instance and said second virtual machine instance are distinct instances of a same type of virtual machine;

wherein said first virtual machine instance exists within said server concurrently with said second virtual machine instance; ~~and~~

wherein said first virtual machine instance and said second virtual machine instance are two of a plurality of virtual machine instances, associated with said server, that share access to data stored in a shared state area allocated in volatile memory associated with said server;

wherein establishing the first session between said server and the first user includes establishing a first database session between a database system and the first user; and

establishing the second session between said server and the second user includes establishing a second database session between the database system and the first user.

2. (Original) The method of Claim 1 further comprising the step of sharing, between said first virtual machine instance and said second virtual machine instance, a set of one or more resources within said shared state area.

3. (Original) The method of Claim 2 wherein the step of sharing a set of one or more resources includes sharing data associated with an object class.

4. (Original) The method of Claim 1 wherein said plurality of virtual machine instances share read-only access to said data stored in said shared state area allocated in volatile memory within said server.

5. (Original) The method of Claim 1 wherein:

 said shared state area stores data associated with an object class; and

 said first virtual machine instance stores, in session-specific memory associated with said first virtual machine instance, a first value for a static variable associated with said object class; and

 said second virtual machine instance stores, in session-specific memory associated with said second virtual machine instance, a second value for said static variable associated with said object class.

6. (Original) The method of Claim 1 further comprising the steps of:

responding to a call associated with a particular session with said server by allocating a call memory for the particular virtual machine instance associated with said particular session; and discarding said call memory upon termination of said call.

7. (Original) The method of Claim 1 further comprising the step of:
responding to a call associated with a particular session with said server by scheduling, for execution in a system thread, the particular virtual machine instance associated with said particular session.

8. (Previously Presented) The method of Claim 1 further comprising the steps of:
spawning the first virtual machine instance by instantiating a data structure associated with a single session; and
storing a pointer within said data structure to provide access to the data stored in the shared state area.

9. (Currently Amended) A computer-readable medium carrying instructions for servicing requests received by a server in a multiple-user environment, the instruction comprising instructions for performing the steps of:
establishing a first session between said server and a first user;
establishing a second session between said server and a second user;
responding to requests that are received by said server in said first session by executing virtual machine code using a first virtual machine instance; and

responding to requests that are received by said server in said second session by executing virtual machine code using a second virtual machine instance;
wherein said first virtual machine instance and said second virtual machine instance are distinct instances of a same type of virtual machine;
wherein said first virtual machine instance exists within said server concurrently with said second virtual machine instance; **and**
wherein said first virtual machine instance and said second virtual machine instance are two of a plurality of virtual machine instances, associated with said server, that share access to data stored in a shared state area allocated in volatile memory associated with said server;
wherein establishing the first session between said server and the first user includes establishing a first database session between a database system and the first user; and
establishing the second session between said server and the second user includes establishing a second database session between the database system and the first user.

10. (Original) The computer-readable medium of Claim 9 further comprising instructions for performing the step of sharing, between said first virtual machine instance and said second virtual machine instance, a set of one or more resources within said shared state area.

11. (Original) The computer-readable medium of Claim 10 wherein the step of sharing a set of one or more resources includes sharing data associated with an object class.

12. (Original) The computer-readable medium of Claim 9 wherein said plurality of virtual machine instances share read-only access to said data stored in said shared state area allocated in volatile memory within said server.

13. (Original) The computer-readable medium of Claim 9 wherein:

said shared state area stores data associated with an object class; and

said first virtual machine instance stores, in session-specific memory associated with said first virtual machine instance, a first value for a static variable associated with said object class; and

said second virtual machine instance stores, in session-specific memory associated with said second virtual machine instance, a second value for said static variable associated with said object class.

14. (Original) The computer-readable medium of Claim 9 further comprising instructions for performing the steps of:

responding to a call associated with a particular session with said server by allocating a call memory for the particular virtual machine instance associated with said particular session; and

discarding said call memory upon termination of said call.

15. (Original) The computer-readable medium of Claim 9 further comprising instructions for performing the step of:

responding to a call associated with a particular session with said server by scheduling, for execution in a system thread, the particular virtual machine instance associated with said particular session.

16. (Previously Presented) The computer-readable medium of Claim 9 further comprising instructions for performing the steps of:

spawning the first virtual machine instance by instantiating a data structure associated with a single session; and
storing a pointer within said data structure to provide access to the data stored in the shared state area.

17-18. (Canceled)